



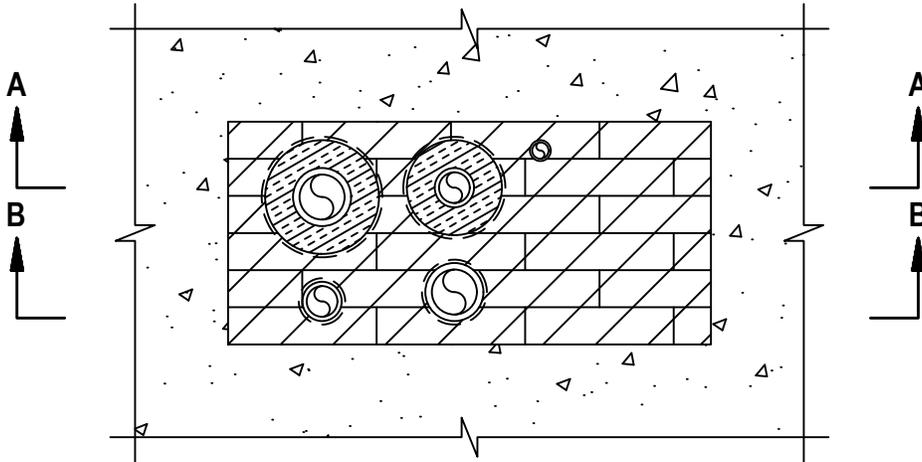
Classified by
Underwriters Laboratories, Inc.
to UL 1479

System No. C-AJ- 8357

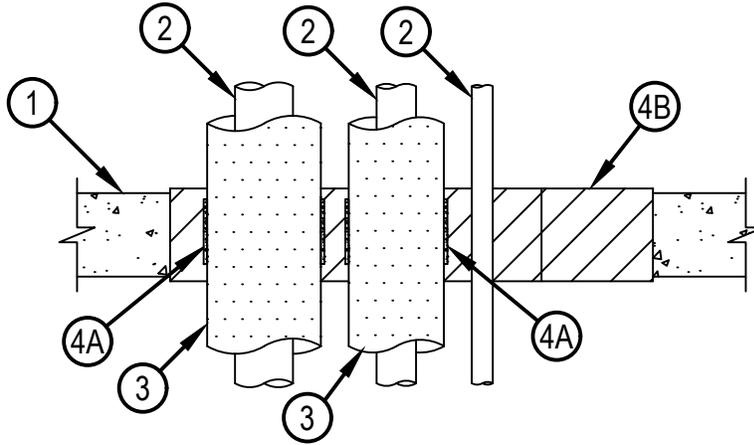
CAJ 8357

ANSI/UL1479 (ASTM E814)
F Rating — 2 Hr
T Rating — 1-3/4 Hr

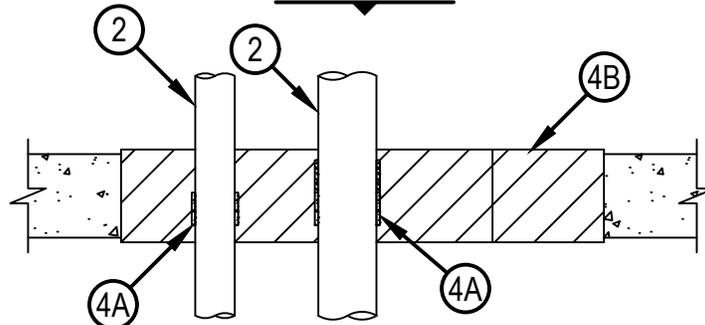
TOP VIEW



SECTION A-A



SECTION B-B



Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
September 26, 2025

System No. C-AJ- 8357

CAJ 8357

1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max area of square or rectangular opening is 312 in². (2013 cm²) with a max dimension of 26 in. (660 mm).
See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Nonmetallic Pipe — One or more penetrants may be installed within the opening. Penetrants to be rigidly supported on both sides of floor or wall assembly. All penetrants are to have a minimum of 1-1/2 in. annular space between penetrants and minimum 1 in. annular space between the periphery of the opening.
 - A. Cross-Linked Polyethylene (PEX) Pipe — Nom 3 in. diam (or smaller) SDR 9 PEX pipe for use in closed (process or supply) piping systems.
 - B. Polyvinyl Chloride (PVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - C. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.
3. Pipe Covering* — (Optional, for use only with Item 2A) Max 1-1/2 in. (38 mm) thick hollow cylindrical heavy density (min 3.5 pcf) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. See Table 1 for where insulation may be used. See Pipe and Equipment Covering - Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
4. Firestop System — The firestop system shall consist of the following:
 - A. Fill, Void or Cavity Material* — Wrap Strip — Nominal 3/16 in. (5 mm) thick x 1-3/4 in. (44 mm) installed in number of stacks and layers as designated in Table 1 below, recessed 1 in. from bottom of CFS-BL Firestop Blocks when in a floor, or recessed 1 in. from either side of CFS-BL Firestop Blocks when in a wall assembly and continuously wrapped over the outer circumference of the penetrant, with ends butted and held in place with (masking or aluminum) tape.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 648-E W45/1-3/4" Firestop Wrap Strip
 - B. Fill, Void or Cavity Material* — Fire blocks installed centered within the floor or wall assembly installed with min 5 in. (127 mm) dimension passing through and centered within the opening. Blocks to be firmly packed and completely fill the entire area and thickness of opening.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-BL Firestop Block
 - C. Fill Void or Cavity Materials* — Fill material applied to any voids that may exist around penetrants and fire blocks.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE MAX Intumescent Sealant or CP618 Firestop Putty Stick
Note: CP 618 is not suitable for use with CPVC (Item 2C).

Max Pipe Dia. In. (mm)	Penetrant Type	Insulation In. (mm)	Number of Wrap Strip Layers	Number Wrap Strip Stacks
3 in (75mm)	PEX	Max 1-1/2 (38) GFI	1	2
3 in (75mm)	PEX	None	1	2
2 in (50mm)	PEX	Max 1-1/2 (38) GFI	1	2
2 in (50mm)	PEX, PVC, CPVC	None	1	1
1 in (25mm)	PEX, PVC, CPVC	None	0	0

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of
Underwriters Laboratories, Inc.
September 26, 2025